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### REMARKS

Claims 1-28 are pending, with claims 1, 15, 19, and 27 being independent. Claims 1, 15 and 27 have been amended. No new matter has been added. Reconsideration and allowance of the above-referenced application are requested.

#### Allowable Subject Matter:

The indication of allowable subject matter in claims 6-12, 20-23 and 28 is acknowledged and appreciated. The claims are retained.

#### Claim Rejections under 35 U.S.C. 102(b) & 103(a):

Claims 1, 3-4, 14-15 and 27 stand rejected under 35 U.S.C. 102(b) as allegedly being anticipated by Kruest (U.S. 5,963,144). Claims 2-4 and 16 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Kruest as applied to claim 1 and further in view of Snodgrass et al. (U.S. 5,583,850). Claims 5 and 17-18 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Kruest in view of Snodgrass et al. as applied to claims 1-2 and 15 and further in view of Wood, Jr. (U.S. 6,104,333). Claim 13 stands rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Kruest as applied to claim 1 in view of Alicot et al. (U.S. 5,990,794). Claims 19 and 24 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Kruest in view of Shafer (U.S. 5,942,978). Claim 25 stands rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Kruest in view of Shafer as applied to claim 19 in view of Atkins et al. (U.S. 6,661,336). Claim 26 stands rejected under 35 U.S.C. 103(a) as

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allegedly being unpatentable over Kruest in view of Shafer and Altkins et al as applied to claim 25 and further in view of Alicot et al. These contentions are respectfully traversed.

Independent claim 19 recites, "a radio frequency identification (RFID) tag reader that sends commands including at least one sequence of associated commands used to identify an RFID tag on an article; and multiple passive RFID tags, each tag being attached to an article and each tag comprising a radio frequency sub system and control logic coupled with the radio frequency sub system, wherein the control logic resets tag communications and initiates a non responsive state in response to at least one event, the non responsive state being independent of supplied power, and the control logic responds to a wake command but ignores other commands in the command sequence while the tag is in the non responsive state, and the wake command response concludes the non responsive state." (Emphasis added.)

In rejecting independent claim 19, the Official Action refers to two different and distinct states taught by Kruest: (1) a traditional isolate state (which is briefly described in Kruest's background), and (2) the CLOAK state described in Kruest's detailed description. With respect to the isolate state, the Official Action notes, "The powering off and on cycle has the effect of resetting the logic circuit in the RFID tag allowing it to respond anew (col. 2 lines 50-55)." (*See* Office Action at page 6.) As this makes clear, in contrast with the presently claimed subject matter, the isolate state described in Kruest is not independent of supplied power. To the contrary, Kruest and the Office Action explicitly disclose and acknowledge that the described state is dependent on supplied power.

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Furthermore, while the CLOAK state described in Kruest is independent of supplied power, this state times out after a predetermined period. (See Kruest at col. 3, lines 26-34.) There is no wake command described in Kruest that affects the CLOAK state. To the contrary, the Radio Frequency Identification (RFID) tag of Kruest is not physically capable of responding to a wake command while in the CLOAK state because the antenna is disconnected from the control logic. (See Kruest at col. 2, line 62 to col. 3, line 13.) In Kruest, the interrogator/reader cannot communicate with the RFID tag during the CLOAK period because the antenna is disconnected, and thus, no wake command can be received and processed by the CLOAKED RFID tag described in Kruest.

In contrast with Kruest, claim 19 is directed to a system including an RFID tag with a non-responsive state that is independent of supplied power, and control logic that responds to a wake command but ignores other commands in the command sequence while the tag is in the non responsive state, where the wake command response concludes the non responsive state. Thus, the presently claimed subject matter can prevent a tag from jumping into the middle of current tag-reader communications using a non-responsive state that is independent of supplied power (the non-responsive state is maintained even if the tag falls out of the RF field), but this non-responsive state can still be concluded by a wake command. (See present specification at ¶¶s 24, 25 and 32.) Kruest and the art of record fails to teach or suggest this claimed subject matter. Thus, independent claim 19 should be in condition for allowance.

With respect to independent claim 1, Kruest fails to teach or suggest the claimed following state because Kruest provides no details regarding any state of operation of Kruest's

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RFID tag, except for the CLOAK state. The Official Action fails to address this deficiency of Kruest. For claim 1, the Official Action notes that the non-responsive CLOAK state ends after a time delay of 2-5 seconds (*see* Official Action at page 3), but the bare fact that the CLOAK state ends provides no information about what state the RFID tag enters after the CLOAK state. For independent claims 15 and 27, the Official Action appears to confuse the isolate state described in Kruest's background with the CLOAK state described in Kruest's detailed description (*see* Official Action at page 3), and fails to address the claimed interaction of the non-responsive state (that is independent of supplied power) and the command structure.

Nonetheless, to expedite prosecution and more clearly differentiate the subject matter claimed in the present application, independent claims 1, 15 and 27 have been amended to specify that the non-responsive state concludes in response to receipt of a wake command. In view of the above amendments and remarks, the art of record clearly fails to teach or suggest the subject matter of claims 1, 15 and 27.

In particular, Kruest does not allow its non-responsive state to conclude upon receipt of a wake command because such an extension is not technically possible. Kruest describes an RFID tag in which a CLOAK state involves disconnecting the RFID antenna in the tag for a predetermined time period. (*See* Kruest at col. 2, line 62 to col. 3, line 67; col. 5, lines 8-12; and col. 5, line 41 to col. 6, line 17.) This disconnection of the antenna prevents communications with the tag all together while the tag is in the CLOAK state. Thus, the RFID tag of Kruest is physically incapable of receiving a wake command while in the CLOAK state.

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Furthermore, Kruest seeks to keep the RFID tags inactive and noninterfering with the RF field. A primary goal of Kruest is to minimize interference (by an already read tag) by reducing the effective absorption and scattering aperture of the tag's antenna to near zero; thus electromagnetically removing the RFID tag from the zone of interrogation during the predetermined time period. (See Kruest at col. 2, line 62 to col. 3, line 35; col. 3, lines 55-59; col. 4, lines 35-60; and col. 6, lines 35-52.) In contrast, the claimed subject matter of the present application maintains the RFID tag in a state that can still receive input, and thus the antenna is still interfering in the RF field. (See present specification at ¶'s 25, 28, 31 and 35.) Thus, Kruest teaches away from the presently claimed subject matter.

In view of the above, independent claims 1, 15 and 27 are in condition for allowance. Dependent claims 2-5, 13-14, 16-18 and 24-26 are patentable based on the above remarks and their own merits. For example, with respect to claim 2, the cited portions of Snodgrass describe how a responder station can identify and respond to a command directed to the station. While multiple commands are shown and described in connection with Figure 11 of Snodgrass, these are each individual commands that do not build on each other because each response to a command results in a transition back to the same idle state 310. (See *e.g.*, Figure 11 of Snodgrass and Figure 3 of the present application.) Thus, the proposed combination of Kruest with Snodgrass fails to describe, as recited in claim 2, "wherein the following state comprises an initial communication state from a plurality of communication states, wherein the plurality of communication states allow response to a sequence of associated commands when receipt of the command sequence begins in the initial communication state." (Emphasis added.)

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Additionally, it should be noted that Kruest is focused on a very different technical issue than Snodgrass and Wood. Kruest's cloaking technique is directed to allowing a passive RFID tag to retain its state even when power is removed, thereby eliminating multiple readings of the same tag when powered up multiple times. In contrast, Wood and Snodgrass describe anti-collision techniques used during a single interrogation session, where the tag remains powered during the entire session.

In general, the proposed combinations of Kruest with Snodgrass, Wood, Alicot, Shafer and Atkins fail to establish a prima facie case of obviousness because the proposed combinations fail to teach or suggest all the claim limitations, there is not a reasonable expectation of success for the proposed combinations, and Kruest teaches away from the proposed combinations.

In the Response to Arguments section, the Official Action states, "Kruest suggests the interrogator communicates with RFID tags through the RF field and the tag in the cloak state when responses to a logic command in an identification system (col. 3, lines 1-13)." (See Office Action at pages 4 & 5.) However, the cited portion of Kruest in fact makes very clear that the RFID tag cannot receive communications from the interrogator while in the CLOAK state:

An RC circuit is charged by activation of the CLOAK signal and thereafter discharges during a predetermined RC time period as determined by a high impedance series antifuse leakage transistor. The antenna is thus disconnected for a time sufficient to allow the remaining RFID tags in an RF interrogation field to be identified. Meanwhile, during the disconnection of the antenna from the RFID chip and its loading causes its effective absorption and scattering aperture to be reduced near zero so as to electromagnetically remove the RFID tag from the

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zone of interrogation during the predetermined time period. Hence, the interrogated tag remains disconnected and noninterfering with the RF field used to interrogate the remaining tags.

(See Kruest at col. 3, lines 1-13; emphasis added.) A passive RFID tag in a noninterfering state, as described in Kruest, cannot receive a wake command because the tag must interfere with the RF field to receive communications from the interrogator. Moreover, one skilled in the art would not be motivated to modify Kruest to allow for receipt of a wake command because this would require reconnecting the antenna to make the tag interfere in the RF field, which undermines Kruest's goal of reducing interference by the cloaked tags.

#### Conclusion

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific issue or comment does not signify agreement with or concession of that issue or comment. Because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

It is respectfully suggested for all of these reasons, that the current rejection is overcome, that none of the cited art teaches or suggests the features which are claimed, and therefore that all

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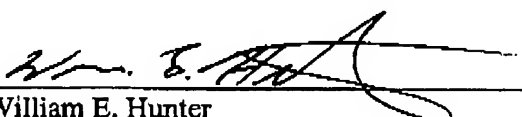
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of these claims are in condition for allowance. A formal notice of allowance is thus respectfully requested.

No fees are believed due with this response. Please apply any necessary charges or credits to deposit account 06-1050.

Respectfully submitted,

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